

Serial No.: 10/806,385
Docket No.: 28951.2162

IN THE CLAIMS:

1. (Currently Amended) A choke coil comprising:

a coil with at least one of terminals and an intermediate tap, the coil comprising punched and folded metal plate having at least two semi-circular disks folded over each other;

said coil embedded in a curable magnetic material which is molded together with said coil ~~which also comprises a molded connection;~~ and

a radiator comprising a material having thermal conductivity higher than that of air located on a surface of the fully cured magnetic material.

2. (Currently Amended) The choke coil according to claim 1, wherein the radiator is located on at least one of a top surface and an under surface of the magnetic material.

3. (Previously Presented) The choke coil according to claim 2, wherein the radiator extends outwardly from the top surface of the magnetic material or re-enters said magnetic material through a side surface, and extends to the under surface of said magnetic material.

4. (Previously Presented) The choke coil according to claim 1, wherein the radiator extends radially just above the location of an air core of the coil.

5. (Previously Presented) The choke coil according to claim 1, wherein the radiator includes a plurality of parallel slits.

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6. (Previously Presented) The choke coil according to claim 1, wherein the radiator comprises a flexible material.

7. (Previously Presented) The choke coil according to claim 1, wherein the magnetic material comprises material selected from the group consisting of at least one ferrite magnetic material, a composite of ferrite magnetic powder, an insulation resin, and a composite of soft magnetic material alloy powder, and an insulation resin.

8. (Currently Amended) An electronic device mounted with a DC/DC converter thereon, wherein the DC/DC converter uses a choke coil including:

a coil with at least one of terminals and an intermediate tap, the coil comprising a punched and folded metal plate having at least two semi-circular disks folded over each other;

said coil embedded in a curable magnetic material which is molded together with said coil ~~which also comprises a molded connection;~~ and

a radiator comprising a material having thermal conductivity higher than that of air located on a surface of the fully cured magnetic material.